

#### Lab Problem 4 Acid Identification

You have been given a 0.50 *M* NaOH and four Beral-type pipets labeled A, B, C, and D. These pipets contain solutions of Ba(NO<sub>3</sub>)<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, HNO<sub>3</sub>, or phenolphthalein, not necessarily in that order. Devise and carry out an experiment to identify the contents of the four pipets and determine the concentration of both acids.

In your lab notebook:

- Make sure you provide a detailed explanation of your procedure (a list will suffice)
- Show all your calculations, as well as the reactions.
- State the identity and concentration of solutions A, B, C, and D

If you need more solutions, they will be provided. Carry out all of your experimentation in a 24-well plate.